

Table G-1: 2000 CH<sub>4</sub> Emissions from Petroleum Production Field Operations

Activity/Equipment	Emission Factor	Units	Activity Factor	Units	Emissions (Bcf/yr)
<b>Vented Emissions</b>					<b>47.754</b>
Oil Tanks	18 scf of CH <sub>4</sub> /bbl crude		1,234	MMbbl/yr (non stripper wells)	22.086
Pneumatic Devices, High Bleed	345 scfd CH <sub>4</sub> /device		142,840	No. of high-bleed devices	17.998
Pneumatic Devices, Low Bleed	35 scfd CH <sub>4</sub> /device		265,275	No. of low-bleed devices	3.342
Chemical Injection Pumps	248 scfd CH <sub>4</sub> /pump		28,595	No. of pumps	2.589
Vessel Blowdowns	78 scfy CH <sub>4</sub> /vessel		186,502	No. of vessels	0.015
Compressor Blowdowns	3,775 scf/yr of CH <sub>4</sub> /compressor		2,531	No. of compressors	0.010
Compressor Starts	8,443 scf/yr. of CH <sub>4</sub> /compressor		2,531	No. of compressors	0.021
Stripper wells	2,345 scf/yr of CH <sub>4</sub> /stripper well		348,867	No. of stripper wells vented	0.818
Well Completion Venting	733 scf/completion		4,731	Oil well completions	0.003
Well Workovers	96 scf CH <sub>4</sub> /workover		40,050	Oil well workovers	0.004
Pipeline Pigging	2.40 scfd of CH <sub>4</sub> /pig station		0	No. of crude pig stations	0.000
Offshore Platforms, Gulf of Mexico	1,283 scfd CH <sub>4</sub> /platform		1,832	No. of oil platforms	0.858
Offshore Platforms, Other U.S. Areas	1,283 scfd CH <sub>4</sub> /platform		23	No. of oil platforms	0.011
<b>Fugitive Emissions</b>					<b>2.476</b>
Offshore Platforms, Gulf of Mexico	56 scfd CH <sub>4</sub> /platform		1,832	No. of oil platforms	0.037
Offshore Platforms, Other U.S. Areas	56 scfd CH <sub>4</sub> /platform		23	No. of oil platforms	0.000
Oil Wellheads (heavy crude)	0.13 scfd/well		13,052	No. of hvy. crude wells *	0.001
Oil Wellheads (light crude)	16.6 scfd/well		172,081	No. of lt. crude wells *	1.045
Separators (heavy crude)	0.15 scfd CH <sub>4</sub> /separator		10,970	No. of hvy. crude seps.	0.001
Separators (light crude)	14 scfd CH <sub>4</sub> /separator		99,837	No. of lt. crude seps.	0.505
Heater/Treaters (light crude)	19 scfd CH <sub>4</sub> /heater		75,695	No. of heater treaters	0.530
Headers (heavy crude)	0.08 scfd CH <sub>4</sub> /header		13,929	No. of hvy. crude hdrs.	0.000
Headers (light crude)	11 scfd CH <sub>4</sub> /header		43,183	No. of lt. crude hdrs.	0.171
Floating Roof Tanks	338,306 scf CH <sub>4</sub> /floating roof tank/yr.		24	No. of floating roof tanks	0.008
Compressors	100 scfd CH <sub>4</sub> /compressor		2,531	No. of compressors	0.092
Large Compressors	16,360 scfd CH <sub>4</sub> /compressor		0	No. of large comprs.	0.000
Sales Areas	41 scf CH <sub>4</sub> /loading		1,760,539	Loadings/year	0.071
Pipelines	0 scfd of CH <sub>4</sub> /mile of pipeline		30,467	Miles of gathering line	0.000
Well Drilling	0 scfd of CH <sub>4</sub> /oil well drilled		7,437	No. of oil wells drilled	0.000
Battery Pumps	0.24 scfd of CH <sub>4</sub> /pump		160,200	No. of battery pumps	0.014
<b>Combustion Emissions</b>					<b>1.630</b>
Gas Engines	0.08 scf CH <sub>4</sub> /HP-hr		15,945	MMHP-hr	1.276
Heaters	0.52 scf CH <sub>4</sub> /bbl		2113.0	MBbl/yr	0.001
Well Drilling	2,453 scf CH <sub>4</sub> /well drilled		7,437	Oil wells drilled, 1995	0.018
Flares	20 scf CH <sub>4</sub> /per Mcf flared		485,883	Mcf flared/yr	0.010
Offshore Platforms, Gulf of Mexico	481 scfd CH <sub>4</sub> /platform		1,832	No. of oil platforms	0.321
Offshore Platforms, Other U.S. Areas	481 scfd CH <sub>4</sub> /platform		23	No. of oil platforms	0.004
<b>Process Upset Emissions</b>					<b>0.548</b>
Platform Emergency Shutdowns	256,888 scfy/platform		1,855	No. of platforms	0.477
Pressure Relief Valves	35 scf/yr/PR valve		176,498	No. of PR valves	0.006
Well Blowouts Offshore	5.0 MMscf/blowout		2.25	No. of blowouts/yr	0.011
Well Blowouts Onshore	2.5 MMscf/blowout		24.8	No. of blowouts/yr	0.062
<b>Total (excluding stripper wells)</b>					<b>52.42</b>